## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/521,174
Source:	1FWP
Date Processed by STIC:	7/5/06

## ENTERED



**IFWP** 

RAW SEQUENCE LISTING DATE: 07/05/2006
PATENT APPLICATION: US/10/521,174 TIME: 13:48:42

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3 <110> APPLICANT: AMANO, Yuichiro
             SUGIYAMA, Yasuo
             NISHIDA, Mayumi
              TAKETOMI, Shigehisa
      8 <120> TITLE OF INVENTION: Disease Model Animal Carrying Heterologous PPAR Alpha Gene
Introduced
     9
              Thereinto And Use Thereof
    11 <130> FILE REFERENCE: 2005-0041A/WMC/00279
    13 <140 > CURRENT APPLICATION NUMBER: 10/521,174
    14 <141> CURRENT FILING DATE: 2005-1-14
    16 <150> PRIOR APPLICATION NUMBER: JP 2002-206162
    17 <151> PRIOR FILING DATE: 2002-07-15
    19 <160> NUMBER OF SEQ ID NOS: 9
    21 <170> SOFTWARE: PatentIn version 3.1
    23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 1404
    25 <212> TYPE: DNA
    26 <213 > ORGANISM: Homo sapiens
    28 <220> FEATURE:
    29 <221> NAME/KEY: CDS
    30 <222> LOCATION: (1)..(1404)
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    35 Met Val Asp Thr Glu Ser Pro Leu Cys Pro Leu Ser Pro Leu Glu Ala
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    37 ggc gat cta gag agc ccg tta tct gaa gag ttc ctg caa gaa atg gga
    38 Gly Asp Leu Glu Ser Pro Leu Ser Glu Glu Phe Leu Gln Glu Met Gly
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                                        25
    40 aac atc caa gag att tcg caa tcc atc ggc gag gat agt tct gga agc
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    41 Asn Ile Gln Glu Ile Ser Gln Ser Ile Gly Glu Asp Ser Ser Gly Ser
    43 ttt ggc ttt acg gaa tac cag tat tta gga agc tgt cct ggc tca gat
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    44 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly Ser Asp
    46 ggc teg gtc atc acg gac acg ctt tca cca gct tcg agc ccc tcc tcg
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    47 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro Ser Ser
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    49 gtg act tat cet gtg gtc eec gge age gtg gae gag tet eec agt gga
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    50 Val Thr Tyr Pro Val Val Pro Gly Ser Val Asp Glu Ser Pro Ser Gly
    52 gca ttg aac atc gaa tgt aga atc tgc ggg gac aag gcc tca ggc tat
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    53 Ala Leu Asn Ile Glu Cys Arg Ile Cys Gly Asp Lys Ala Ser Gly Tyr
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    55 cat tac gga gtc cac gcg tgt gaa ggc tgc aag ggc ttc ttt cgg cga
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57		•	115				•	120	•	•	•	•	125		,	J	
					aag												432
59	Thr	Ile	Arg	Leu	Lys	Leu	Val	Tyr	Asp	Lys	Cys	Asp	Arg	Ser	Cys	Lys	
60		130					135					140					
				_	aac	_			_	_		_	_			_	480
		GIn	Lys	Lys	Asn	_	Asn	Lys	Cys	Gln	_	Cys	Arg	Phe	His	_	
	145					150	<b>.</b>				155					160	500
					999												528
66	Cys	Leu	ser	val	Gly 165	met	ser	nis	ASII	170	тте	Arg	Pne	GIY	175	Met	
	cca	ana	tet	aaa	aaa	aca	222	cta	222		a a a	att	ctt	200		<b>C22</b>	576
		_			Lys			_		_	_				_	-	370
69			501	180			_, _		185		014			190	CyD	o <sub>z</sub> u	
	cat	qac	ata		gat	tct	gaa	act		qat	ctc	aaa	tct		acc	aaq	624
		-		-	Asp		_		_	_				_	_	_	
72		-	195		-			200		-		-	205			•	
73	aga	atc	tac	gag	gcc	tac	ttg	aag	aac	ttc	aac	atg	aac	aag	gtc	aaa	672
74	Arg	Ile	Tyr	Glu	Ala	Tyr	Leu	Lys	Asn	Phe	Asn	Met	Asn	Lys	Val	Lys	
75		210					215					220					
					ctc												720
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	lle	His	Asp	Met	Glu	Thr	Leu	Cys	Met		Glu	Lys	Thr	Leu		Ala	
81			~		245					250					255		016
					aat Asn												816
84	пуъ	пеп	vai	260	ASII	Gry	TIE	GIII	265	пуъ	GIU	Ala	GIU	270	Arg	116	
	+++	cac	tac		cag	tac	aca	tca		gag	acc	atc	aca		ctc	aca	864
					Gln												001
87			275	- 2		-2-		280					285				
88	gaa	ttc	gcc	aag	gcc	atc	сса	ggc	ttc	gca	aac	ttg	gac	ctg	aac	gat	912
					Āla												
90		290					295					300					
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					atg												1008
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96					325					330					335		1056
					cgt Arg												1056
99	GIY	PHE	TIE	340	Arg	GIU	Pile	ьеи	цуS 345	ser	ьеи	Arg	цуѕ	350	Pile	Cys	
	) dat	ato	ato			. aac	. +++	. cat		- 00	at c	T 220	1 tt		- ac	ctg	1104
																a Leu	1101
102			355			-, L		360				, -	365				
		cto			aqt	gat	ato			ttt	gto	get			att	tgc	1152
																e Cys	

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105 370 375 380	
	222 244 1200
106 tgt gga gat cgt cct ggc ctt cta aac gta gga cac att gaa 107 Cys Gly Asp Arg Pro Gly Leu Leu Asn Val Gly His Ile Glu	
107 Cys Gly Asp Alg Plo Gly Led Led Ash val Gly His lie Gld .  108 385 390 395	400
109 cag gag ggt att gta cat gtg ctc aga ctc cac ctg cag agc	
110 Gln Glu Gly Ile Val His Val Leu Arg Leu His Leu Gln Ser	
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112 ccg gac gat atc ttt ctc ttc cca aaa ctt ctt caa aaa a	
113 Pro Asp Asp Ile Phe Leu Phe Pro Lys Leu Leu Gln Lys Met	Ala Asp
114 420 425 430	3244
115 ctc cgg cag ctg gtg acg gag cat gcg cag ctg gtg cag atc	
116 Leu Arg Gln Leu Val Thr Glu His Ala Gln Leu Val Gln Ile	ile ràs
117 435 440 445	nta tha 1202
118 aag acg gag tcg gat gct gcg ctg cac ccg cta ctg cag gag	
119 Lys Thr Glu Ser Asp Ala Ala Leu His Pro Leu Leu Gln Glu	lie Tyr
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121 agg gac atg tac	1404
122 Arg Asp Met Tyr	
123 465	
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128 <213> ORGANISM: Homo sapiens 130 <400> SEQUENCE: 2	
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133 Gry Asp Bed Grd Ser Fro Bed Ser Grd Grd Frie Bed Grif Grd 134 20 25 30	Met Gly
135 Asn Ile Gln Glu Ile Ser Gln Ser Ile Gly Glu Asp Ser Ser	G1 G
	Gly Ser
136 35 40 45	
136 35 40 45 137 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly	
136 35 40 45 137 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly 138 50 55 60	Ser Asp
136 35 40 45  137 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly  138 50 55 60  139 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro	Ser Asp Ser Ser
136 35 40 45  137 Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly  138 50 55 60  139 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro  140 65 70 75	Ser Asp Ser Ser 80
136       35       40       45         137       Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly         138       50       55       60         139       Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro         140       65       70       75         141       Val Thr Tyr Pro Val Val Pro Gly Ser Val Asp Glu Ser Pro	Ser Asp Ser Ser 80 Ser Gly
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136	Ser Asp Ser Ser 80 Ser Gly 95 Gly Tyr
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136       35       40       45         137 Phe Gly Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly       55       60         138 50       55       60       60         139 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro       60         140 65       70       75         141 Val Thr Tyr Pro Val Val Pro Gly Ser Val Asp Glu Ser Pro       142 Asp Glu Ser Pro         142       85       90         143 Ala Leu Asn Ile Glu Cys Arg Ile Cys Gly Asp Lys Ala Ser       110         145 His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly Phe Phe       110         146 115       120       125         147 Thr Ile Arg Leu Lys Leu Val Tyr Asp Lys Cys Asp Arg Ser       140         148 130       135       140         149 Ile Gln Lys Lys Asn Arg Asn Lys Cys Gln Tyr Cys Arg Phe       150       155         150 Lys Leu Ser Val Gly Met Ser His Asn Ala Ile Arg Phe Gly       155	Ser Asp Ser Ser 80 Ser Gly 95 Gly Tyr Arg Arg Cys Lys His Lys 160
136       35       40       45         137 Phe Gly Phe Gly Phe Thr Glu Tyr Gln Tyr Leu Gly Ser Cys Pro Gly 138       50       55       60         139 Gly Ser Val Ile Thr Asp Thr Leu Ser Pro Ala Ser Ser Pro 140       65       70       75         141 Val Thr Tyr Pro Val Val Pro Gly Ser Val Asp Glu Ser Pro 142       85       90         143 Ala Leu Asn Ile Glu Cys Arg Ile Cys Gly Asp Lys Ala Ser 144       100       105       110         145 His Tyr Gly Val His Ala Cys Glu Gly Cys Lys Gly Phe Phe 146       115       120       125         147 Thr Ile Arg Leu Lys Leu Val Tyr Asp Lys Cys Asp Arg Ser 148       130       135       140         149 Ile Gln Lys Lys Asn Arg Asn Lys Cys Gln Tyr Cys Arg Phe 150       145       150       155         151 Cys Leu Ser Val Gly Met Ser His Asn Ala Ile Arg Phe Gly 152       165       170	Ser Asp Ser Ser 80 Ser Gly 95 Gly Tyr Arg Arg Cys Lys His Lys 160 Arg Met
136	Ser Asp Ser Ser 80 Ser Gly 95 Gly Tyr Arg Arg Cys Lys His Lys 160 Arg Met
136	Ser Asp Ser Ser 80 Ser Gly 95 Gly Tyr Arg Arg Cys Lys His Lys 160 Arg Met 175 Cys Glu

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156
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                                     200
     157 Arg Ile Tyr Glu Ala Tyr Leu Lys Asn Phe Asn Met Asn Lys Val Lys
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                                                      220
     159 Ala Arg Val Ile Leu Ser Gly Lys Ala Ser Asn Asn Pro Pro Phe Val
                                                  235
     161 Ile His Asp Met Glu Thr Leu Cys Met Ala Glu Lys Thr Leu Val Ala
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                         245
     163 Lys Leu Val Ala Asn Gly Ile Gln Asn Lys Glu Ala Glu Val Arg Ile
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                                          265
     165 Phe His Cys Cys Gln Cys Thr Ser Val Glu Thr Val Thr Glu Leu Thr
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                                     280
                                                          285
     167 Glu Phe Ala Lys Ala Ile Pro Gly Phe Ala Asn Leu Asp Leu Asn Asp
                                 295
     169 Gln Val Thr Leu Leu Lys Tyr Gly Val Tyr Glu Ala Ile Phe Ala Met
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     171 Leu Ser Ser Val Met Asn Lys Asp Gly Met Leu Val Ala Tyr Gly Asn
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     173 Gly Phe Ile Thr Arg Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Cys
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     175 Asp Ile Met Glu Pro Lys Phe Asp Phe Ala Met Lys Phe Asn Ala Leu
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                                     360
     177 Glu Leu Asp Asp Ser Asp Ile Ser Leu Phe Val Ala Ala Ile Ile Cys
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     179 Cys Gly Asp Arg Pro Gly Leu Leu Asn Val Gly His Ile Glu Lys Met
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     180 385
                             390
     181 Gln Glu Gly Ile Val His Val Leu Arg Leu His Leu Gln Ser Asn His
                         405
     183 Pro Asp Asp Ile Phe Leu Phe Pro Lys Leu Leu Gln Lys Met Ala Asp
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                     420
     185 Leu Arg Gln Leu Val Thr Glu His Ala Gln Leu Val Gln Ile Ile Lys
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     193 <211> LENGTH: 20
     194 <212> TYPE: DNA
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     198 <223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying
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DATE: 07/05/2006

TIME: 13:48:42

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     258 <223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying
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     270 <223> OTHER INFORMATION: Oligonucleotide designed to act as fluorogenic probe for
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     273 <400> SEQUENCE: 9
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/521,174

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19

VERIFICATION SUMMARYDATE: 07/05/2006PATENT APPLICATION: US/10/521,174TIME: 13:48:43

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